May 9, 2000. This is a second CPA. Specifically, this Preliminary Amendment responds to the Final Office Action dated November 13, 2000 (Paper No. 20). This action is timely filed as it is being submitted within the three month period set for response.

Please amend the above-identified Application as follows:

In the Claims:

Please substitute the following for pending Claim 1:

1.   (Amended four times)   A method for maximizing satellite constellation coverage at predetermined local peak times for a set of predetermined geographic locations, the method comprising:

determining a satellite constellation having a first coverage, the constellation including at least two desired satellites, wherein each of the desired satellites has a trajectory associated therewith and a relative orbit within the satellite configuration;

determining a period of orbit for each of the desired satellites;

determining a time dependent coverage of the satellite constellation based on the orbit period and the trajectory of each of the desired satellites;

determining a second coverage based on the time dependent coverage, which provides maximum coverage by the satellite constellation at the predetermined local peak times for the set of predetermined geographic locations;

determining a tilted trajectory for each of the desired satellites to reorient the satellite constellation without changing the relative orbit of the at least two desired

satellites with respect to each other within the satellite constellation so as to obtain the second coverage; and

generating command signals for modifying the trajectory of each desired satellite based on the tilted trajectory.

Please substitute the following for pending Claim 10:

10.   (Amended four times)   A system for maximizing satellite constellation coverage at predetermined local peak times for a set of predetermined geographical locations, the satellite constellation having a first coverage and including at least two desired satellites wherein each of the desired satellites have a trajectory associated therewith and a relative orbit within the satellite constellation, the system comprising:

a processor operative to determine a period of orbit for each of the desired satellites to determine a time dependent coverage of the satellite constellation based on the orbit period and the trajectory of each of the desired satellites, to determine a second coverage based on the time dependent coverage which provides maximum coverage by the satellite constellation at the predetermined local peak times and the predetermined geographic locations, and to tilt the trajectory of each of the desired satellites within the satellite constellation to obtain the second coverage; and

means for generating command signals for modifying the trajectory of each of the desired satellites based on the tilted trajectory.

Kindly add the following additional new claims:

--20. (New)   A method for providing varying satellite constellation coverage at a plurality of geographic locations while maximizing the resources of the satellite constellation at all times, comprising: --

providing a satellite constellation including a plurality of satellites each having a trajectory associated therewith and a relative orbit with said satellite constellation, said satellite constellation having a first coverage area;

selecting a first geographic location having a predetermined local peak time;

tilting each of said plurality of satellites to reorient said satellite constellation without changing the relative orbit of said plurality of satellites with respect to each other within said satellite constellation in order to obtain a second coverage area, which maximizes coverage at said first geographic location during said predetermined local peak time.--

--21. (New)   The method of claim 20, further comprising:

selecting a second geographic location having a second predetermined local peak time that is different from said first geographic location predetermined local peak time; and

tilting each of said plurality of satellites to reorient said satellite constellation without changing the relative orbit of said plurality of satellites with respect to each other within said satellite constellation in order to obtain a third coverage area,